CLIMATE POLICY GROUP

A PUBLIC POWER COALITION

March 15, 2007

The Honorable John Dingell
Chairman
House Energy and Commerce Committee
2125 Rayburn
Washington, DC 20515

The Honorable Rick Boucher
Chairman
Subcommittee on Energy and Air Quality
House Energy and Commerce Committee
2125 Rayburn
Washington, DC 20515

Dear Chairmen Dingell and Boucher:

In reply to your letter sent February 27th to various members of industry, the Climate Policy Group would like to provide responses for the record addressing developing climate legislative initiatives. The Climate Policy Group is a public power alliance that consists of public power utilities that collectively seek to provide input into the debate on global climate change and to work within the legislative and regulatory framework to craft a rational and economically viable federal policy on mitigating climate change impacts.

The Climate Policy Group utilities serve over 7,000,000 customers in six states. With generating resources of 22,000 megawatts (MW) of capacity and over 75% of energy needs derived from fossil fuel-based resources, our customers have a significant stake in the outcome of this debate.

We understand the Committee is grappling with difficult decisions regarding how best to proceed to address increasing concentrations of greenhouse gases in the atmosphere and the potential impact that could have on our changing climate.

Should Congress choose to undertake a new federal policy on addressing global climate change, the Climate Policy Group believes the policy must comply with the following minimum principles and standards:

COLORADO SPRINGS UTILITIES; CPS ENERGY; JEA; MEAG POWER; NEBRASKA PUBLIC POWER DISTRICT; OMAHA PUBLIC POWER DISTRICT; ORLANDO UTILITIES COMMISSION; PLATTE RIVER POWER AUTHORITY; SANTEE COOPER
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- CO_2 must be addressed on an economy-wide basis
- Research and development must be expanded significantly to develop cost-effective technologies to capture, sequester and/or reduce CO_2
- Coal-fired generation must remain a source of stable and affordable electricity supply as a matter of national security
- CO_2 policy must protect the U.S. economy by balancing U.S. economic interests with emerging industrial nations
- The production of electricity with zero emission technologies must be expanded
- Energy conservation and efficiency must be increased
- Incentives to promote new technologies must apply to all types of electric utilities
- A cap and trade system is not appropriate for controlling CO_2 emissions due to the lack of affordable, reliable and commercially available control technologies.

We are particularly interested in addressing the issue of technology; its availability for utilities with fossil fuel plants to comply with any mandatory reduction programs; and how such availability could be the primary driver for decisions related to the timing of any potential implementation of a market based control program. The lack of a ghg capture and storage technology for new fossil fuel electric generating units and to retrofit existing fossil fuel electric generating units directly impacts the workability of a market mechanism.

As testimony before the Committee has confirmed, significant technological hurdles exist in the development of carbon capture, separation and storage systems that must be resolved before fossil fuel electric generating units can provide significant CO_2 reductions. In the absence of these transition technologies or development of transformational reduction technologies, emissions from large fossil electric generating units will remain and utilities will have few options to reduce emissions beyond fuel switching to natural gas. It is for this reason that control actions forced too quickly will prove either unattainable or overly burdensome on the economy.

Domestic electric generation is roughly 70% fossil fuel—a source of electricity that cannot simply be eliminated. Presently, US electric generation sources comprise roughly one-third of the US manmade CO_2 emissions into the atmosphere. Electric consumption is expected to grow by 50% in the next 25 years to meet the needs of a growing population and economy. Not only will new capacity have to be added to meet this demand, but the rapidly aging generation fleet, including many nuclear units, will also have to be replaced. This demand cannot be met without including fossil fuels in our nation's energy infrastructure mix.

Any US policy intended to reduce domestic man-made ghg emissions is expected to include a meaningful electric sector component. In order for the electric sector to meet the challenge of supplying growing demand for electricity, while at the same time reducing ghg emissions, technology hurdles to capture, transport and store CO_2 must be overcome, and policy sequestration issues (siting, permitting, environmental integrity of geologic formations and liability) must be addressed. Electric utilities face three types of barriers to implementing carbon capture and storage: (1) securing retrofit technologies

for existing units; (2) building new generation that meets or is ready to meet the standards necessary to comply with any ghg policy; and, (3) finding, developing, utilizing and monitoring long term CO_2 storage.

A reasonable technology that allows for efficient, reliable and proven sequestration of CO_2 must be a predicate for significant mandatory ghg emissions reductions. According to EPRI's most recent cost estimates for pulverized coal plants, the addition of CO_2 capture using the currently most developed technical option, amine solvents, along with CO_2 drying and compression, pipeline transportation to a nearby storage site, and underground injection, would add about 60–80% to the net present value of life-cycle costs of electricity (expressed as levelized cost-of-electricity, or COE, and excluding storage site monitoring, liability insurance, etc.). In addition, because the energy consumed by the capture process uses roughly 40% of the output of a plant, additional generation capacity will have to be added to replace that lost to the ghg capture systems—this means more fuel is consumed, more plants must be built and more resources, such as rail capacity must be available. All of this together translates into a potentially large increase in energy costs that would prove devastating to US consumers and to US industrial capacity.

The CPG position is that a technological solution must be found to minimize economic disruption of ghg sequestration systems before Congress can put in place caps to reduce ghg emissions. Additionally, major international emissions sources, including those in developing countries, will not make the sacrifices to reduce their emissions if the costs remain as high as they are today. Only by driving down the costs of technologies to capture, store or reduce ghg emissions can we be sure that a proposal will work for both the US and for major trading partners and developing countries.

We thank you in advance for your decision to open up this dialog with industry members and request that you place the CPG on the list for receipt of future communications. Our answers to some of the specific questions proposed for industry are provided as an attachment. Though we have attempted to be as detailed as possible, the responses of the CPG generally are oriented to provide insights to electric generation specific issues. We have not attempted to provide commentary on how specific policies affecting other sectors might be addressed under an economy wide program.

Sincerely

Colorado Springs Utilities
CPS Energy
JEA
MEAG Power
Nebraska Public Power District
Omaha Public Power District
Orlando Utilities Commission
Platte River Power Authority
Santee Cooper

Cc: The Honorable Joe Barton
The Honorable Dennis Hastert
Enclosure

Question 2a. **Which sectors should be included and should some be phased in over time?**

Any successful approach to climate change must be economy-wide and cover all sectors of the economy. Should Congress decide to adopt a mandatory greenhouse gas (ghg) emissions reduction program, the point of regulation needs to be upstream at the point of fuel production or point of importation (wellhead, natural gas processors, mine mouth, coal processing facility, refinery gate, point of importation, etc.) to ensure economy-wide coverage of all sectors. However, upstream regulation should not preclude provision of allowances to downstream plants to help compensate for the costs of compliance.

Because CO2 reduction technologies do not exist sufficient to actually reduce CO2 emissions from fossil fuel electric generating units, there would need to be a technology development transition period before any cap and trade program could be adopted. Different sectors of the economy may not develop requisite technologies in the same time frame. However, it is important to note that imposing a cap and trade on *individual sectors on different timetables* could result not only in pushing the point of regulation downstream to the plant level but also lead to less than economy-wide coverage. Any future cap should not phase in different sectors on different timetables but rather impose limits upstream that would capture the entire economy.

Question 2b. To what degree should the details be set in statute by Congress or delegated to another entity?

Given the use of fossil fuels in all economic activity in the US, and the importance of the cost and availability of these fuels to the economic well-being of the US, we believe it is imperative that Congress directly determine the framework and details of ghg emission reduction policies on an on-going basis. Furthermore, Congress, not Executive Branch agencies, should determine changes to policy, such as changes in the rates of reduction or escalators in any safety valves.

Question 2c. Should the program's requirements be imposed upstream, downstream or some combination thereof?

The program requirements should be imposed upstream to ensure economy-wide coverage and less administrative burden on the U.S. economy.

Question 2d. How should allowances be allocated? Should non-emitting sources, such as nuclear plants, be given allowances?

If Congress were to adopt a cap and trade at some point in the future, freely distributed allowances should be provided to ghg emitters only. Non-emitters will not be required to make the investments or reductions required of emitting entities. While we believe that base load ghg free generation such as nuclear power and hydropower should be provided significant non-allowance incentives to encourage the development of new nuclear power

plants or incremental hydropower, we do not support distribution of allowances to either existing hydro-electric or nuclear power plants.

Allowance allocations to individual fossil fuel electric generating units should be calculated on a heat input basis and by comparing the carbon content of the fossil fuel burned in a unit to the carbon content of all fossil fuels burned in electric generating units nationwide. The legislation should consider periodic updating of allowance allocations to fossil fuel electric generating units to reflect changes in heat inputs, unit retirements, and initial operation of new units.

Question 2f. Where should the cap be set for different years?

Caps should not be imposed before compliance technologies are available. There will need to be a technology transition phase before caps are set. Caps could be triggered by the availability of cost-effective, commercially available ghg control technologies and resolution of major technological hurdles and policy issues involved with geologic storage of CO_2. Caps would need to be phased in to reflect a rational deployment timeline.

Question 2g. Which greenhouse gases should be covered?

All greenhouse gases should be covered.

Question 2h. Should early reductions be credited? If so, what criteria should be used to determine what is an early reduction?

Early reductions should be credited. We do not have a recommendation on criteria at this time.

Question 2i. Should the program employ a safety valve?

If economic models or cost projections are wrong, it is possible that capping ghg emissions could result in significant and very negative economic impacts, including closing plants and moving capital investment, jobs and ghg emissions offshore. This would have negative effect on both the economy and the concentration of ghgs in the atmosphere. It is critically important that, if Congress adopts a cap and trade program at some point in the future, economic safety valves or “off-ramps” must be included to protect the economy from sudden or significant energy price increases and assure that jobs are not lost to overseas manufacturing plants in nations with no caps on ghg emissions and lower environmental standards.

Question 2j. Should offsets be allowed? If so, what types of offsets? What criteria should govern the types of offsets that would be allowed?

Questions surrounding offsets are very complex and any such program should be thoroughly reviewed to assure environmental integrity and to examine the ability of public power utilities to develop, use, and acquire offsets.

Question 2k. If an auction or safety valve is used, what should be done with the revenue from those features?

The absence of technologies that will enable utilities or any other industries to reduce emissions in a growing economy suggests the overriding need for a far greater government commitment to research and development of clean energy technology. In the case of research and development of high risk transformational technologies, the Federal government must play the major role in conducting or coordinating such basic research.

There must be a technology transition stage to any future ghg emissions cap. It may be appropriate to adopt some sort of user fee, such as a modest carbon content fee or flat fee on fossil fuels, to provide a dedicated revenue stream for a trust fund established for the sole purpose of clean electricity generation technology development. In the absence of assurance that the revenues would be dedicated to this purpose, and outside the traditional appropriations process, we could not support such fees.

Question 2l. Are there special features that should be added to encourage technological development?

There is a need for greater federal funding of clean energy development. This should include both basic research and funding to assist that deployment of technology. Incentives for clean energy development must apply to all parts of the utility industry and public power utilities must receive incentives comparable to those provided under the Internal Revenue Code to taxable entities.

Question 4. How should potential mandatory domestic requirements be integrated with future obligations the United States may assume under the 1992 UN Framework Convention on Climate Change? In particular, how should any U.S. domestic regime be timed to any international obligations? Should adoption of mandatory domestic requirement be conditioned upon assumption of specific responsibilities by developing nation?

Unilateral action by the US will not only harm US manufacturing competitiveness, moving capital investment, jobs and emissions offshore, but it will also be an exercise in futility. Just as an economy-wide policy must be adopted in the U.S., the U.S. must condition its adoption of any mandatory policy on similar actions by major foreign emitters. Foreign nations that do not impose mandatory policies on their own economies will have strong competitive reasons for not wanting to follow the US example of capping ghg emissions. The best mechanism to address this problem is to promote the development of low-cost, reliable technologies to reduce ghg emissions. Development of cost effective ghg emission reduction technologies will provide the US with the greatest

leverage and influence over large developing nations whose emissions will surpass the US within a couple of years.

At the same time, it should not be assumed that developed nations will necessarily meet their objectives or commitments and this must be part of the equation as well. While the EU, Japan and Canada currently are under the Kyoto Protocol and have committed to its specific ghg emission reductions, very few of these countries are on target to meet reduction requirements they agreed to under the Protocol.